



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

EDITORIAL COMMITTEE : S. NEWCOMB, Mathematics ; R. S. WOODWARD, Mechanics ; E. C. PICKERING, Astronomy ; T. C. MENDENHALL, Physics ; IRA REMSEN, Chemistry ; CHARLES D. WALCOTT, Geology ; W. M. DAVIS, Physiography ; HENRY F. OSBOEN, Paleontology ; W. K. BROOKS, C. HART MERRIAM, Zoology ; S. H. SCUDDEE, Entomology ; C. E. BESSEY, N. L. BRITTON, Botany ; C. S. MINOT, Embryology, Histology ; H. P. BOWDITCH, Physiology ; WILLIAM H. WELCH, Pathology ; J. McKEEN CATTELL, Psychology.

NEW SERIES. VOLUME XVIII.

JULY - DECEMBER, 1903.

NEW YORK
THE MACMILLAN COMPANY
1903

THE NEW ERA PRINTING COMPANY,
41 NORTH QUEEN STREET,
LANCASTER, PA.

CONTENTS AND INDEX.

N. S. VOL. XVIII.—JULY TO DECEMBER, 1903.

The Names of Contributors are Printed in Small Capitals.

ABNEY, W. DE W., Address of President of Section of Education of British Association, 577
ADAMS, C. C., Breeding Area of Kirtland's Warbler in Michigan, 217
ADAMS, F. D., Washington on the Chemical Analysis of Igneous Rocks, 470
ADLER, C., The International Catalogue of Scientific Literature, 268
Agricultural Education, A. C. TRUE, 684
ALDRICH, T. H., and E. A. SMITH, Grand Gulf Formation, 20
Allegheny Observatory Library, Exchanges, F. L. O. WADSWORTH, 471
ALLEN, J. A., Antedated Publications, 631
American Association for the Advancement of Science, and Affiliated Societies, 669; St. Louis Meeting, 506, 673, 705, 787; Membership in, 822
Andrews, E. J., and H. N. Howland, Elements of Physics, W. LEC. STEVENS, 271
ANGELL, J. R., Villa's Contemporary Psychology; Royce's Outlines of Psychology; Judd's Genetic Psychology; Stratton's Experimental Psychology; Strong's Why the Mind has a Body, 748
Antarctica, E. S. BALCH, 55, 303; H. R. MILL, 182
Anthropological, Society of Washington, W. HOUGH, 18, 148; Association, German, G. G. MACCURDY, 623
Archeology and Ethnology, International Commission of, 250
Arctic Nomenclature, E. S. BALCH, 501
ARMSBY, H. P., Isodynamic Replacement of Nutrients, 481
ARNOLD, R., and DE W. C. WILEY, Geological Society of American Universities, 691
Arrhenius, S. A., Physik, R. DE C. W., 498
Atomic Theory, F. W. CLARKE, 513
Auroras, 27-day Period in, and its Connection with Sun-spots, H. H. CLAYTON, 632

B., A. P., Cornell School of Geography, 380
B., F. A., Gonionemus versus Gonionema, 501
Bacterial Spot, A. F. Woods, 537
Bahama Islands, Expedition to, G. B. SHATTUCK, 427
Bailey, S. I., Variable Stars in the Cluster Centauri, G. MÜLLER, 593
BALCH, E. S., Antarctica, 55, 303; Arctic Nomenclature, 501
BARBOUR, E. H., Distribution of Daimonelix, 504
Barometer, The Word, J. C. SHEDD, 278
BASKERVILLE, C., Kunzite, 303; Browning on the Rarer Elements, 497; Elisha Mitchell Scientific Society, 603; and G. F. KUNZ, Action of Radium, Roentgen Rays and Ultra-violet Light on Minerals and Gems, 769

BAUM, H. E., Name of the Breadfruit, 439
BELL, A. G., and Z. T. SOWERS, Radium and Cancer, 155
BELL, R. G., and V. L. KELLOGG, Variations induced in Bombyx mori by Controlled Varying Food Supply, 741
BENEDICT, F. G., Teaching of Chemistry in Graded and Secondary Schools, 465
BENJAMIN, M., John Elfret Watkins, 300
BESSEY, C. E., Botanical Notes, 27, 121, 246, 315, 540, 796; Peirce's Plant Physiology, 52; Livingston's Diffusion and Osmotic Pressure in Plants, 208
Bibliographical Soc. of Chicago, C. H. BROWN, 275
BIGELOW, M. A., N. Y. Acad. of Sci., Biology, 559
Biological, Laboratory at the Tortugas, C. MACMILLAN, 57; H. M. RICHARDS, 58; R. T. COLBURN, 86; Society of St. Louis, W. L. EIKENBERRY, 210; of Washington, F. A. LUCAS, 689, 722
BLAIN, JR., A. W., Mich. Ornithological Club, 435
Blatchley's Orthoptera of Indiana, F. M. WEBSTER, 557
BOLTON, H. C., Ben Jonson's Alchemist, 556
Bolton, Henry Carrington, 798
Bombyx mori, Variations induced in, by Controlled Varying Food Supply, V. L. KELLOGG and R. G. BELL, 741
Botanical, Society of Washington, H. J. WEBBER, 19; Notes, C. E. BESSEY, 27, 121, 246, 315, 540, 796; F. D. HEALD, 374; Station, Tropical, D. S. JOHNSON, 210
Brain-weights, of Japanese, E. A. SPITZKA, 371; of Brothers, E. A. SPITZKA, 699
Breadfruit, Name of, H. E. BAUM, 439
British Association for the Advancement of Science: Southport Meeting, 321; Address of President, N. LOCKYER, 385, 417; Grants, 444; Address of President of Geological Section, W. W. WATTS, 449; of Subsection of Astronomy and Meteorology, W. N. SHAW, 487; of Anthropological Section, J. SYMINGTON, 545; of Educational Section, W. DE W. ABNEY, 577; Meteorology at, A. L. ROTCH, 657; Anthropology at, G. G. MACCURDY, 716
BROWN, A. E., The A. O. U. Code, 535
BROWN, C. H., Bibliographical Society of Chicago, 275
Browning, P. E., Introduction to the Rarer Elements, C. BASKERVILLE, 497
BUCHNER, E. F., Ten Years of American Psychology, 193, 233
BURDON-SANDERSON, J., The Limits of Science, 140

CAMERON, F. K., Toxic Effect of Acids on Seedlings, 411
Carnegie Institution, 797, 833, 801

CASTLE, W. E., Mendel's Law of Heredity, 396; Heredity of 'Angora' Coat in Mammals, 760
 Catalogue, International, of Scientific Literature, C. ADLER, 268
 CHAMBERLAIN, A. F., Right-Handedness, 788
 Chemical Society, American, General Meeting, A. M. PATTERSON, 97; New York Section, H. C. SHERMAN, 602, 753; Northeastern Section, ARTHUR M. COMEY, 826; Washington, A. SEIDELL, 828
 Chemistry, New Terms in, H. C. COOPER, 153; High School, in Relation to Work of a College Course, R. P. WILLIAMS, 330; Teaching of, in Graded and Secondary Schools, F. G. BENEDICT, 465
 Cheston, H. C., P. R. Dean and C. E. Timmerman, Physics, W. LEC. STEVENS, 271
 Chicago, University of, Medical Club, 54; Investigations in Progress at, 375; T. D. A. COCKERELL, 500
 Chwolson, O. D., Physik, W. LEC. STEVENS, 271
 CLARKE, F. W., The Atomic Theory, 513
 CLAYTON, H. H., Professor Bell on Kite Construction, 204; Auroras and Sun-spots, 632
 Clemson College Science Club, F. S. SHIVER, 691, 728
 Coast and Geodetic Survey, O. H. TITTMANN, 33; Magnetic Work of, 374
 COCKERELL, T. D. A., Abbreviations of New Mexico, 58; Investigations in Progress at the University of Chicago, 500
 Code, A. O. U., A. E. BROWN, 535
 COLBURN, R. T., Proposed Biological Station at the Tortugas, 86
 COLE, F. N., American Mathematical Society, 410, 664
 Colorado College, Medical Research Laboratory, W. F. SLOCUM, 58
 Colton, B. P., Zoology, J. H. GEROULD, 112
 COMEY, A. M., Northeastern Section of American Chemical Society, 826
 Congress, International, of Arts and Science at St. Louis Exposition, J. DEWEY, 275, 665; R. S. WOODWARD, 302; H. MÜNSTERBERG, 559, 788, 764
 Convocation Week Meetings of Scientific Societies, 751, 825
 COOK, O. F., Four new Species of Central American Rubber Tree, 436
 COOPER, H. C., New Terms in Chemistry, 153
 COVILLE, F. V., Small's Flora of Southeastern United States, 627
 CRANE, T. F., E. W. HURFCUT and W. F. DURAND, Resolutions of Faculty of Cornell University on Death of Professor Thurston, 732
 Craniology of People of Scotland, A. HRDLICKA, 568
 CRAWLEY, H., 'Tablettes Zoologiques,' 59
 CURRIE, R. P., Entomological Society of Washington, 82
 Daimonelix, Distribution of, E. H. BARBOUR, 504
 DALL, W. H., Grand Gulf Formation, 83; Princeton University Expedition to Patagonia, 146
 DANENO, J. B., Phototropism under Light-rays of Different Wave-lengths, 604
 DANIELS, F., Upland Plant Societies of Kent Co., Michigan, 215
 DAVENPORT, C. B., Vernon on Variation in Animals and Plants, 16
 DAVY, J. B., Vegetation of the Transvaal, 696
 DELLENBAUGH, F. S., Indian Pottery, 148
 Devil-fish, A Little Known, T. GILL, 473
 DEWEY, J., St. Louis Congress of Arts and Science, 275, 665
 Discussion and Correspondence, 20, 55, 83, 113, 148, 180, 210, 243, 275, 302, 337, 369, 411, 435, 471, 500, 530, 559, 603, 631, 665, 693, 729, 755, 787
 Doctorates Conferred by American Universities, 257
 Dodge, C. W., General Zoology, 824
 Drawing Board and Scales in Trigonometry and Navigation, R. A. HARRIS, 108
 Drude's Theory of Optics, C. R. MANN, 432
 Duerden's West Indian Madreporarian Polyps, J. P. McM., 80
 EARLE, F. S., Torrey Botanical Club, 630, 690, 754, 790
 Edser, E., Light for Students, W. LEC. STEVENS, 271
 Education, Specialization in, S. W. WILLISTON, 129; and the World's Work, R. S. WOODWARD, 161; Technical, Efficiency of, W. C. MENDENHALL, 295
 Educational Assoc., National Resolutions of, 283
 EIGENMANN, C. H., Water Supply of Havana, 281
 EIKENBERRY, W. L., Biological Society of St. Louis, 210
 Electrical Engineering, College Courses and, D. C. JACKSON, 710
 Electricity at High Pressures, E. THOMSON, 337
 Electrochemical Society, American, 284
 ELIOT, C. W., Definition of a Cultivated Man, 76
 Eliot and Soulé on Caterpillars and their Moths, C. M. WEED, 53
 Elisha Mitchell Sci. Soc., C. BASKERVILLE, 603
 English, Better, in Science, P. C. WARMAN, 563
 Entomological Society of Washington, R. P. CURRIE, 82
 Ethnological and Archeological Survey of Cal., B. I. WHEELER and F. W. PUTNAM, 570
 Examinations, Scientific and Technical, 413
 F., W. S., Notes on Physics, 282, 312
 FERGUSON, M. C., Spongy Tissue of Strasburger, 308
 Ferry, E. S., Physics, W. LEC. STEVENS, 271
 FINLAY, G. I., N. Y. Acad. of Sciences, Geology and Mineralogy, 17
 Fisheries, Bureau of, 476
 Fishes of African Family Kneriidae, T. GILL, 338
 Flageolets, Primitive, E. H. HAWLEY, 412
 FLEXNER, S., An Aspect of Modern Pathology, 3
 Flora of Serpentine Barrens of Southeast Pa., J. W. HARSHBERGER, 339
 Flower, Sir William, Memorial to, 249
 Formal, Dangers of, E. A. SPITZKA, 87
 Formation, Grand Gulf, E. A. SMITH and T. H. ALDRICH, 20; W. H. DALL, 83; E. W. HILGARD, 180
 Fossils, Carboniferous, in 'Ocoee' Slates in Ala., E. A. SMITH, 244
 FRANKLIN, W. S., Oudin's Polyphase Apparatus and Systems, 241; Hobbs on the Arithmetic of Electrical Measurements, 242; Misuse of Physics by Biologists and Engineers, 641
 FRAZER, P., A Visual Phenomenon, 729
 Fruit, Food Value of, 540

FULLER, M. L., and A. C. VEATCH, Results of Re-survey of Long Island, 729

GAGE, A. P., Introduction to Physical Science, W. LEC. STEVENS, 271

GENTHE, K. W., Seminar Method in Natural Sciences, 116

Geological Survey, Summer Work of, 187; Explorations in Egypt, 441; Soc. of Amer. Universities, R. ARNOLD and DE W. C. WILEY, 691

GEROULD, J. H., Colton's Zoology, 112

GILL, T., Fishes of the African Family Kneriidæ, 338; A Little Known Devil-fish, 473

Gonionemus versus Gonionema, L. MURBACH, 373; F. A. B., 501

GOULD, C. N., Evidences of Human Remains in Jacobs' Cavern, 151

GOULD, G. M., Hitherto Undescribed Visual Phenomenon, 536

Granite, New Spheroidal, J. F. KEMP, 503

HALE, G. E., and R. H. TUCKER, Fifth Satellite of Jupiter, 500

HALL, E. H., American Association for the Advancement of Science, 787

Haller, B., Lehrbuch der vergleichenden Anatomie, J. P. McM., 368

HARRIS, R. A., Drawing Board and Scales in Trigonometry and Navigation, 108

HARSHBERGER, J. W., Flora of Serpentine Barrens of Southeast Pa., 339

Harvard University, Endowment of Applied Science, 668

HATCHER, J. B., Vertebrate Paleontology at the Carnegie Museum, 559; and J. W. STANTON, Judith River Beds and their Correlation with Belly River Beds, 211

Hatcher's Reports of Princeton University Expeditions to Patagonia, W. H. DALL, 146

Hathaway's Edition of Jonson's Alchemist, H. C. BOLTON, 556

Havana, Water Supply of, C. H. EIGENMANN, 281

HAWLEY, E. H., Primitive Flagelloets, 412

Hay, O. P., and S. W. WILLISTON, The Society of the Vertebrate Paleontologists of America, 827

HAYFORD, J. F., Longitude of Honolulu, 589

HEALD, F. D., Botanical Notes, 374; Toxic Effect of O and OH Ions on Seedlings of Indian Corn, 472

HEILPRIN, A., Ascending Obelisk of Mont Pelé, 184

Heredity of 'Angora' Coat in Mammals, W. E. CASTLE, 760

HEREICK, C. J., The Summer Laboratory as an Instrument of Biological Research, 263

HEYL, P. R., Specific Heat of Mercury, 56

HILGARD, E. W., Grand Gulf Formation, 180; Chemistry of Soils as Related to Crop Production, 755

HOBBS, W. H., The Frontier of Physiography, 538

Hobbs, W. R. P., Arithmetic of Electrical Measurements, W. S. FRANKLIN, 242

HOLLAND, W. J., Rothschild and Jordan's Revision of Sphingidæ, 15

Honolulu, Longitude of, J. F. HAYFORD, 589

HOPKINS, T. C., Onondaga Academy of Science, 530

Horticultural and Agricultural Terms, New, H. J. WEBBER, 501

Hortvet, J., Elementary Practical Physics, W. LEC. STEVENS, 271

HOUGH, T., and W. T. SEDGWICK, Training in Physiology and Hygiene and Public Schools, 353

HOUGH, W., Anthropological Society of Washington, 18, 148

HOVEY, E. O., N. Y. Acad. of Sci., Geology and Mineralogy, 17, 631, 789; Mont Pelé, 633

HOWARD, L. O., Mexican Cotton Boll Weevil, 693

HRDLICKA, A., Contribution to the Craniology of the People of Scotland, 568

HULL, G. F., Mann's Advanced Optics, 661

HURD, H. M., Duty and Responsibility of the University in Medical Education, 65

Huxley Memorial Lecture, 634

Ichthyosauria, Triassic, Recent Literature on, J. C. MERRIAM, 311

Indian Pottery, F. S. DELLENBAUGH, 148

JACKSON, D. C., Typical College Course dealing with Phases of Electrical Engineering, 710

JOHNSON, D. S., Jamaica as a Tropical Botanical Station, 210

Judith River Beds and Belly River Beds, J. W. HATCHER and T. W. STANTON, 211

Jupiter, Fifth Satellite of, R. H. TUCKER, G. E. HALE, 500

KEARNEY, T. H., Protective Function of Raphides, 244

KELLOGG, V. L., Some Insect Reflexes, 693; and R. G. BELL, Variations Induced in Bombyx mori by Controlled Varying Food Supply, 741

KEMP, J. F., A New Spheroidal Granite, 503

KING, F. H., Soluble Salts in Soils, 343

Kirtland's Warbler, Breeding Area of, in Michigan, C. C. ADAMS, 217

Kite Construction, Professor Bell on, H. H. CLAYTON, 204

Knight, Wilbur Clinton, A. NELSON, 406

KUNZ, G. F., A New Lilac-colored Spodumene, 280; and C. BASKERVILLE, Action of Radium, Roentgen Rays and Ultra-violet Light on Minerals and Gems, 769

Kunzite, C. BASKERVILLE, 303

L., F. A., Exhibit of U. S. National Museum at St. Louis, 248

Laborde, Professor, Brain of, E. A. SPITZKA, 346

LAMBE, L. M., Recent Zoopalaeontology, 60

LANE, A. C., Absorbed Gases and Vulcanism, 760

LANKESTER, E. R., The Limits of Science, 143

LEE, S., American Method of Appointing University Professors, 89

Lehfeldt, R. A., Text-book of Physics, W. LEC. STEVENS, 271

LENHER, V., Univ. of Wisconsin Science Club, 755

Lesley, J. Peter, J. J. STEVENSON, 1

Lister Institute, 219

LIVINGSTON, B. E., Michigan Plant Societies again, 435

Livingston, B. E., Diffusion and Osmotic Pressure in Plants, C. E. BESSEY, 208

LOCKYER, N., Address of President of British Association, 385, 417; Simultaneous Solar and Terrestrial Changes, 611

LODGE, O., The Limits of Science, 145

LOEW, F. A., Toxic Effect of H and OH Ions on Seedlings of Indian Corn, 304

Long Island, Geology of, A. C. VEATCH, 213; Re-survey of, M. L. FULLER and A. C. VEATCH, 729

LOUGH, J. E., N. Y. Acad. of Sci., Anthropology and Psychology, 81, 724

LOUGHLIN, G. F., Mass. Inst. Technology Geological Journal Club, 791

LUCAS, F. A., Biological Society of Washington, 689, 722

McM., J. P., Duerden's West Indian Madreporean Polyps, 80; Haller's Lehrbuch der vergleichenden Anatomie, 388; Plate's Ueber die Bedeutung Darwinische Selectionsprincips, 628

MACCURDY, G. G., German Anthropological Assoc., 623; Anthropology at the British Assoc., 716

MACFARLANE, J. M., Relation of Science to Common Life, 169

MACMILLAN, C., Biological Laboratory at the Tortugas, 57

Malaria Expedition to the Gambia, 381

Man, Cultivated, Definition of, C. W. ELIOT, 76

MANN, C. R., Drude's Theory of Optics, 432

Mann, C. R., Advanced Optics, G. F. HULL, 661

Marine, U. S., Hospital Service, W. WYMAN, 289; Biological Survey of Univ. of California, W. E. RITTER, 360

Massachusetts Inst. Technology Geological Journal Club, G. F. LOUGHLIN, 791

Mathematical Society, American, F. N. COLE, 410, 664

Mathematics, Association of Teachers of, in Middle States and Maryland, 791

Matter, Modern Views of, 122

MAY, D. W., Relation of Lime and Magnesia to Metabolism, 149

MAYER, A. G., Bahamas vs. Tortugas as a Station for Research in Marine Zoology, 369

Medical Education, Duty and Responsibility of the University, H. M. HURD, 65

Mendel's Law of Heredity, W. E. CASTLE, 396

MENDENHALL, W. C., Technical Education, 295

Mercury, Specific Heat of, P. R. HEYL, 56

MERRIAM, J. C., Triassic Ichthyosauria, 31

MERRITT, E., Radioactive Substances, 41; American Physical Society, 662

Metabolism, Relation of Lime and Magnesia to, D. W. MAY, 149

Meteoric Fall, Bath Furnace, A. M. MILLER, 243

Meteorological, Observations with Kites at Sea, A. L. ROTCH, 113; Investigation, Methods of, W. N. SHAW, 487

Meteorology, Current Notes on, R. DE C. WARD, 90, 154, 185, 217, 314, 345, 505, 731, 795; at the British Association, A. L. ROTCH, 657

MILL, H. R., Antarctica, 182

MILLER, A. M., Bath Furnace Meteoric Fall, 243

Millikan, R. A., Mechanics, Molecular Physics and Heat, W. LEC. STEVENS, 271

Minerals and Gems, Action of Radium, Roentgen Rays and Ultra-violet Light on, G. F. KUNZ and C. BASKERVILLE, 769

MITCHELL, S. A., N. Y. Acad. of Sci., Astronomy, Physics and Chemistry, 559, 727

MORSE, M., Unusual Abundance of Myriapods, 59

Moseley Educational Commission, 505

Mosquito, A New, W. L. UNDERWOOD, 182; Migrations, J. B. SMITH, 761

MÜLLER, G., Bailey's Discussion of Variable Stars in the Cluster Centauri, 593

MÜNSTERBERG, H., International Congress of Arts and Science at St. Louis, 559, 788

MURBACH, L., Gonionemus versus Gonionema, 373

Museum, U. S. National, Exhibit of, at St. Louis, F. A. L., 248

MYERS, B. D., Schneider's Histologie der Tiere, 409

Myriapods, Unusual Abundance of, M. MORSE, 59

National Academy of Sciences, 688

Naturalists, American Society of, 766

Navy, Civil Engineers of, 440

NELSON, A., Wilbur Clinton Knight, 406

New Mexico, Abbreviations of, T. D. A. COCKERELL, 58; Higher Educational Institutions of, W. G. TIGHT, 85

New York Academy of Sciences, Geology and Mineralogy, G. I. FINLAY, 17; E. O. HOVEY, 17, 631, 789; Anthropology and Psychology, J. E. LOUGH, 81, 724; Biology, M. A. BIGELOW, 559; Astronomy, Physics and Chemistry, S. A. MITCHELL, 559, 727; Zoological Park, H. F. O., 218

Nutrients, Isodynamic Replacement of, H. P. ARMSBY, 481

Nutrition Experiments, 475

O., H. F., New York Zoological Park, 218; Recent Zoopaleontology, 665, 699, 835

Oertel, T. E., Medical Microscopy, G. F. WHITE, 434

Ohio State University, Lake Laboratory, 92

Onondaga Acad. of Sci., T. C. HOPKINS, 530

Ornithological Club, Michigan, A. W. BLAIN, JR., 435

Ornithologists' Union, American, J. H. SAGE, 783

Osteological Terms, S. W. WILLISTON, 829

Oudin, M. A., Polyphase Apparatus and Systems, W. S. FRANKLIN, 241

Oxalate of Lime in Plants, H. W. WILEY, 115 .

Paleontologists, Vertebrate, Society of the, S. W. WILLISTON, O. P. HAY, 827

Paleontology, Vertebrate, at the Carnegie Museum, J. B. HATCHER, 569

PARKER, G. H., Willey's Zoological Results, 179

Parthenogenetic Workers, Origin of Female and Worker Ants from the Eggs of, W. M. WHEELER, 830

Pathology, Modern, An aspect of, S. FLEXNER, 3

PATTERSON, A. M., American Chemical Society, 97

PEARSON, K., The Limits of Science, 140

Peirce's Plant Physiology, C. E. BESSEY, 52

Pelé, Mont, Obelisk of, A. HELIPRIN, 184; E. O. HOVEY, 633; I. C. RUSSELL, 792

Philosophical Society of Washington, C. K. WEAD, 723

Phototropism under Light-rays of Different Wave-lengths, J. B. DANENO, 604

Physical Society, American, E. MERRITT, 662

Physics, Notes on, W. S. F., 282, 312; Misuses of, by Biologists and Engineers, W. S. FRANKLIN, 641

Physiography, The Frontier of, W. H. HOBBS, 538

Physiology and Hygiene, Public School Training in, W. T. SEDGWICK and T. HOUGH, 353

Pittsburgh Academy of Science, Biology, F. S. WEBSTER, 791

Plant, Upland, Societies of Kent Co., Mich., F. DANIELS, 215; B. E. LIVINGSTON, 435
 Plate, L., Ueber die Bedeutung des Darwinische Selectionsprincips, J. P. McM., 628
 Pomological Society of America, 369
 Psychological Literature, J. R. ANGELL, 748
 Psychology, American, Ten Years of, E. F. BUCHNER, 193, 233
 Publications, Antedated, J. A. ALLEN, 631
 PUTNAM, F. W., and B. I. WHEELER, Ethnological and Archeological Survey of California, 570
 QUE SCAIS-JE? The Limits of Science, 142
 Quotations, 89, 122, 138, 186, 219, 440, 441, 474, 634, 833
 Radioactive Substances, E. MERRITT, 41
 Radium, 347; and Cancer, A. G. BELL, Z. T. SOWERS, 155; and Helium, 186; A Possible Use for, X., 338
 Raphides, Protective Function of, T. H. KEARNEY, 244
 Reed, Walter, Memorial of, 316
 Reflexes, Some Insect, V. L. KELLOGG, 693
 Remains, Bear and Deer, on Onondaga Lake, W. M. SMALLWOOD, 26; Human, Evidences of, in Jacob's Cavern, C. N. GOULD, 151
 Rhizoctonia solani, Fruiting Stage of, F. M. ROLFS, 729
 Rhodes Scholarships, 156, 834
 RICHARDS, H. M., Biological Laboratory at the Tortugas, 58
 Right-handedness, A. F. CHAMBERLAIN, 788
 RITTER, W. E., Marine Biological Survey Work of University of California, 360
 ROLFS, F. M., Rhizoctonia solani, 729
 ROTCH, A. L., Meteorological Observations with Kites at Sea, 113; Meteorology at the British Association, 657
 Rothschild and Jordan's Revision of Lepidopterous Family Sphingidae, W. J. HOLLAND, 15
 Rowland and FitzGerald, Collected Papers of, R. S. W., 366
 Rubber Tree, Central American, New Species of, O. F. COOK, 436
 RUSSELL, I. C., The Pelé Obelisk, 792
 SAGE, J. H., American Ornithologists' Union, 783
 St. Louis Academy of Sciences, W. TRELEASE, 688, 753
 Salisbury, Lord, as a Man of Science, 440
 Salts, Soluble, found in Soils, F. H. KING, 343
 Sanford, F., Physics, W. LEC. STEVENS, 271
 Sanitation and the Panama Canal, 732
 Schneider, K. C., Lehrbuch der vergleichenden Histologie der Tiere, B. D. MYERS, 409
 Science, Limits of, W. T. THISELTON-DYER, 138, 141, 143; K. PEARSON, 140; J. BURDON-SANDERSON, 140; QUE SCAIS-JE?, 142; E. R. LANKESTER, 143; O. LODGE, 145; Relation of, to Common Life, J. M. MACFARLANE, 169; and Medicine in the Modern University, C. S. SHERRINGTON, 675
 Scientific Books, 15, 52, 80, 112, 146, 179, 208, 241, 271, 336, 366, 409, 432, 470, 497, 529, 556, 593, 627, 661, 748, 785, 824; Notes and News, 28, 60, 93, 124, 157, 191, 220, 252, 285, 316, 348, 382, 413, 445, 476, 508, 541, 571, 606, 636, 669, 702, 733, 766, 798, 837; Journals and Articles, 54, 148, 180, 209, 242, 435, 499, 530, 558, 602, 629, 662, 687, 751, 786, 825
 SEDGWICK, W. T., and T. HOUGH, Training in Physiology and Hygiene and Public Schools, 353
 SEIDELL, A., Washington Chemical Soc., 828
 Seminar Method in Natural Sciences, K. W. GENTHE, 116
 SHATTUCK, G. B., Expedition to Bahama Islands, 427
 SHAW, W. N., Methods of Meteorological Investigation, 487
 SHEDD, J. C., The Word Barometer, 278
 SHERMAN, H. C., American Chemical Society, New York Section, 602, 753
 SHERRINGTON, C. S., Science and Medicine in the Modern University, 675
 SHIVER, F. S., Clemson College Science Club, 691, 728
 Shorter Articles, 26, 59, 87, 115, 149, 182, 211, 244, 280, 303, 338, 371, 412, 436, 473, 501, 537, 563, 604, 633, 693, 729, 760, 792, 829
 SIMONDS, F. W., Texas Academy of Science, 301
 SLOCUM, W. F., Medical Research Laboratory of Colorado College, 58
 Small's Flora of Southeastern United States, F. V. COVILLE, 627
 SMALLWOOD, W. M., Bear and Deer Remains on Shores of Onondaga Lake, 26
 SMITH, E. A., and T. H. ALDRICH, Grand Gulf Formation, 20; Carboniferous Fossils in 'Ocoee' Slates in Ala., 244
 SMITH, J. B., Mosquito Migrations, 761
 SMITH, J. C., Animal Parasite supposed to be Cause of Yellow Fever, 530
 Societies and Academies, 17, 54, 81, 148, 210, 275, 301, 369, 410, 435, 530, 559, 602, 630, 662, 688, 722, 751, 789, 825
 Soils, Chemistry of, as related to Crop Production E. W. HILGARD, 755
 Solar and Terrestrial Changes, Simultaneous, N. LOCKYER, 611
 SOWERS, Z. T., and A. G. BELL, Radium and Cancer, 155
 SPITZKA, E. A., Dangers of Formal, 87; Brain of Professor Laborde, 346; Brain-weight of Japanese, 371; Brain-weight of Brothers, 699
 Spodumene, New Lilac-colored, G. F. KUNZ, 280
 STANTON, T. W., and J. B. HATCHER, Judith River and Belly River Beds, 211
 STEARNS, R. E. C., Eucalypts in the Philippines, 439
 STEVENS, W. LEC., Cheston, Dean and Timmerman's Laboratory Physics; Twiss' Laboratory Physics; Hortvet's Elementary Physics; Ferry's Practical Physics; Millikan's Mechanics, Molecular Physics and Heat; Sanford's Elements of Physics; Andrews and Howland's Elements of Physics; Gage's Introduction to Physical Science; Lehfeldt's Physics; Edser on Light; Chwolson's Lehrbuch der Physik, 271
 STEVENSON, J. J., J. Peter Lesley, 1
 SYMINGTON, J., Address to Anthropological Section of British Association, 545
 T., R. H., Scientific Journals and Articles, 558
 'Tablettes Zoologiques,' H. CRAWLEY, 59
 Texas Academy of Science, F. W. SIMONDS, 301
 Theobald, F. V., Economic Zoology of British Museum, F. M. WEBSTER, 529

Thermodynamics, Graphics of, R. H. THURSTON, 247

THISELTON-DYER, W. T., The Limits of Science, 138, 141, 143

Thompson, Elizabeth, Science Fund, 442

THOMSON, E., Electricity at High Pressures, 337

THURSTON, R. H., Graphics of Thermodynamics, 247

Thurston, Robert Henry, 609; Resolutions of Faculty of Cornell Univ. on Death of, T. F. CRANE, E. W. HUFFCUT and W. F. DURAND, 732

TIGHT, W. G., Higher Educational Institutions of New Mexico, 85

Tissue, of Strasburger, M. C. FERGUSON, 308

TITCHENER, E. B., Hitherto Unpublished Visual Phenomenon, 603

TITTMANN, O. H., Coast and Geodetic Survey, 33

TOOMBO, JR., R., University Registration Statistics, 737

Torrey Botanical Club, F. S. EARLE, 630, 690, 754, 790

Toxic Effect of H and OH Ions on Seedlings of Indian Corn, F. A. LOEW, 304; F. K. CAMERON, 411; F. D. HEALD, 472

Transvaal, Vegetation of, J. B. DAVY, 696

TRELEASE, W., St. Louis Acad. of Sci., 688, 753

TRUE, A. C., New Agricultural Education, 684

TUCKER, R. H., and G. E. HALE, Fifth Satellite of Jupiter, 500

Twiss, G. R., Laboratory Exercises in Physics, W. LEC. STEVENS, 271

UNDERWOOD, W. L., A New Mosquito, 182

University, and Educational News, 31, 64, 95, 128, 160, 192, 224, 256, 288, 320, 352, 384, 415, 448, 478, 512, 543, 576, 608, 640, 672, 704, 736, 768, 800, 840; Professors, American Method of Appointing, S. LEE, 89; Registration Statistics, R. TOMBO, JR., 737

Vaccination, A Case for, C.-E. A. WINSLOW, 101

VAUGHAN, V. C., Johns Hopkins Hospital Reports, 785

Vaughan, Dr. V. C., Twenty-fifth Anniversary of Graduation, 48

VEATCH, A. C., Geology of Long Island, 213; and M. L. FULLER, Results of Resurvey of Long Island, 729

Vernon, H. M., Variation in Animals and Plants, C. B. DAVENPORT, 16

Visual Phenomenon, Hitherto Undescribed, G. M. GOULD, 536; E. B. TITCHENER, 603; P. FRAZER, 729

Vulcanism, Absorbed Gases and, A. C. LANE, 760

W., R. DEC., Arrhenius's Physik, 498

W., R. S., Collected Papers of Rowland and Fitzgerald, 366

WADSWORTH, F. L. O., Exchanges offered by Allegheny Observatory Library, 471

Washington, H. S., Chemical Analysis of Igneous Rocks, F. S. ADAMS, 470

WARD, R. DEC., Current Notes on Meteorology, 90, 154, 185, 217, 314, 345, 505, 731, 795

WARMAN, P. C., A Plea for Better English in Science, 563

Washburn College Observatory and Physical Laboratory, 444

Watkins, John Elfret, M. BENJAMIN, 300

WATTS, W. W., Address to Geological Section of British Association, 449

WEAD, C. K., Philosophical Society of Washington, 723

WEBBER, H. J., Botanical Society of Washington, 19; New Horticultural and Agricultural Terms, 501

WEBSTER, F. M., Theobald's Report on Economic Zoology of British Museum of Natural History, 529; Blatchley's Orthoptera of Indiana, 557

WEBSTER, F. S., Pittsburgh Academy of Science, Biology, 791

WEED, C. M., Eliot and Soulé on Caterpillars and their Moths, 53

Weevil, Cotton Boll, Mexican, L. O. HOWARD, 693

WHEELER, B. I., and F. W. PUTNAM, Ethnological and Archeological Survey of California, 570

WHEELER, W. M., Dodge's General Zoology, 824; Origin of Female and Worker Ants from the Eggs of Parthenogenetic Workers, 830

WHIPPLE, G. C., Whinery on Municipal Public Works, 336

WHITE, G. F., Oertel's Medical Microscopy, 434

WILEY, DE W. C., and R. ARNOLD, Geological Society of American Universities, 691

WILEY, H. W., Oxalate of Lime in Plants, 115

Willey, A., Zoological Results, G. H. PARKER, 179

WILLIAMS, R. P., High School Chemistry in Relation to Work of a College Course, 330

WILLISTON, S. W., Specialization in Education, 129; and O. P. HAY, The Society of Vertebrate Paleontologists of America, 827; Some Osteological Terms, 829

WINSLOW, C.-E. A., A Case for Vaccination, 101

Wisconsin University Science Club, V. LENHER, 755

WOODS, A. F., Bacterial Spot, a New Disease of Carnations, 537

WOODWARD, C. M., New Opportunity for Secondary Schools, 225

WOODWARD, R. S., Education and the World's Work of To-day, 161; International Conference of Arts and Science, 302

WYMAN, W., U. S. Marine Hospital Service, 289

X., A Possible Use for Radium, 338

Yellow Fever, Animal Parasite supposed to be Cause of, J. C. SMITH, 530

Zoology, Marine, Bahamas vs. Tortugas for Research in, A. G. MAYER, 369

Zoopalaeontology, Recent, L. M. LAMBE, 60; H. F. O., 665, 699, 835